PINPOINT HOLDINGS, INC. Report on Implementation of Wireless E911 Phase II ALI KNLF 894

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(1) Type of Technology: PCS 1900 (GSM) Markets: Pinpoint Wireless plans to deploy a network based technology in the markets in which it provides PCS 1900 service.

(2) Testing and Verification:

- a. Testing method to be used: Pinpoint Wireless expects to use the testing methods based upon those described in OET Bulletin 71.
- b. Results of Test already Conducted: Pinpoint Wireless has conducted tests of the currently available location-technologies under consideration (E-OTD, AOA, TDOA, Network Assisted GPS and RF mapping.) The data obtained in each specific trial of location-technology is subject to nondisclosure agreements with the respective vendors and cannot be disclosed publicly.

(3) Implementation Details and Schedules:

- a. GSM Markets: Network assisted GPS deployment will be principally governed by the availability of GSM handsets supporting network assisted GPS. The network component required to support GPS is primarily centralized equipment used to process the handset-based GPS measurements and to monitor network performance. The network component will be installed in the centralized locations such as mobile switching centers ("MSC"). Reference receivers will also need to be deployed in the network. Software enhancements will be needed throughout the network to support the required signaling location related information. Our equipment Vendor informed us that they anticipate that they can complete all the software upgrades in time. Pinpoint Wireless plans to be compliant with the FCC schedule for handset deployment, contingent upon the availability of handsets from the manufacturers
- b. Roll-out Schedules: Deployment schedules for Phase II technology will dictated by PSAP requests.

(4) PSAP Interface:

The company plans on deploying or leasing services a non-call associated signaling network technology utilizing the newly defined network entity called a Mobile Position Center. The functionality of the MPC is defined in TIA/EIA J-STD-036, "Enhanced Wireless 9-1-1- Phase 2", a standard jointly developed by the communications industry and public safety. Per J-STD-036, the MPC provides the point of interface between a wireless carrier and the public safety network and serves as the network entity that retrieves, forwards, stores and controls position date within the location network

We are in the process of selecting an MPC supplier. Vendors are currently in the product development state. One vendor has indicated that a commercial, J-STD-036 compliant MPC, will be available in mid-2001. Test platforms may be available sooner.

Pinpoint Wireless intends to install and begin testing MPC functionality as soon as vendors are able to provide a standard compliant platform. Fully testing MPC functionality, however, requires that ALI service providers upgrade the interface to the ALI system to support J-STD-036. As this is done, we will begin testing end-to-end transmission of Phase II data with ALI service providers.

Software upgrades will be required to support MPC functionality in the MSC. Our MSC vendors have noted that upgrades for the switches will be available between 4th quarter of 2000 to the 4th quarter of 2001.

- (5) Existing Handsets: For handsets which support network assisted GPS, which are required in our GSM networks, Pinpoint Wireless plans to be compliant with the FCC schedule contingent upon handset availability.
- (6) Location of Non-Compatible Handsets: In GSM markets where network assisted GPS technology will be used, Pinpoint Wireless plans to provide a minimum Phase I location information for legacy handsets. Additionally, we plan to evaluate software systems that can use timing advance, cell ID, and RF signal strenth to provide awn approximate location of non-compliant handsets to a level of accuracy that is better than Phase I location information.
- (7) Other Information: A Phase II E911 location system is a very complex technology that has never been fully deployed on any large-scale commercial wireless network anywhere in the world and setting dates for this deployment is difficult. We believe that a full-scale, end-to-end Phase II deployment will

encounter many obstacles and challenges that have not been - and cannot be - foreseen.